

**Conference Attendance, Information and Communication Technology and Teachers
Productivity in Calabar Education Zone, Cross River State, Nigeria.**

Akpam, Gabriel Odey

Department of Educational Management
Faculty of Education,
Cross River University of Technology Calabar
&

Adie, Joy Ashibongye

Udayi, Eucharia Alorye Ogar

Ategwu, Patrick Ogar

Department of Educational Management
Faculty of Educational Foundation Studies
University of Calabar
Calabar

Abstract

This study examined influence of Conference Attendance, Information and Communication Technology on teachers' productivity in Calabar Education Zone, Cross River State. To achieve this purpose, two research hypotheses were posed to guide the study. Literature was reviewed according to the variables of the study. The population of the study consisted of two thousand three hundred and seventeen (2,317) teachers in the 85 public secondary schools in the study area. Systematic random sampling technique was adopted in selecting fifty percent (50%) of the respondents used for the study. A structure questionnaire was used for data collection. Simple regression analysis was used for data analysis the result of this analysis revealed that conference and information and communication technology influence teacher's productivity in the study area. The study suggested that conferences should be organized regularly for teachers and ICT facilities should be provided for teachers to increase their productivity.

Keyword: conference attendance, information and communication technology, teachers, productivity

Introduction

The teacher is a key factor in the delivery of educational contents and learning experiences. It is widely recognized that the teacher plays a crucial role in shaping the minds of learners and that the availability of qualified and trained teachers in adequate numbers is important in attaining quality education. Ekundayo (2019) asserts that the roles played by teachers are central to efforts made to improve the quality of education. This is because the

quality of an educational system is limited by the quality of its teachers, since the only way to improve learning outcome is to improve classroom activities. It is one thing to have teachers and entirely another thing to have the right quality of teachers. For a country to attain quality education, there is need for effective recruitment, training of teachers and ensuring teachers' motivation and retention through appreciation and resource support. This is where human resource development through proper knowledge and skill acquisition come to play. Human resource development include training an individual or employee after he/she is first hired, providing opportunities to learn new skills, distributing different resources for different employee tasks, and any other developmental activities.

Teaching is a profession and only individuals with a clear understanding of what teaching entails should be recruited into the profession. This is because teaching is a serious business and must be treated with a sense of responsibility and integrity. Any person that is forced into teaching is likely to abandon the profession after training or will not be able to cope with its demands. Obi (2019) asserts that teaching must be seen as a profession and the professional teacher must be one who has the calling, is well trained and retrained to be abreast with current trends as well as adequately motivated to remain in the profession to enhance productivity.

The reason is that no formal education can be successfully implemented without the inputs of a trained teacher. Teachers need to have an understanding of the value of children under their tutelage to the future economic, technological, social and industrial growth of Nigeria and that failure to groom them properly have serious damaging consequences on the future of the nation. Esu (2017) reports that, teachers mean a lot to students in the process of acquiring relevant information in the school. Learners expect the teacher to teach them, mold their character and be friendly with them. As a facilitator of knowledge and skills, they expect teachers to help them acquire such in order to be useful to themselves and the society at large. They also expect their teachers to be more knowledgeable than them so as to render the needed support and show them the light. These demands place a lot of responsibility on the teacher to deliver quality teaching towards the attainment of educational goals and objectives.

A productive teacher will ensure that he/she acquires the relevant knowledge and skills required to develop quality manpower through effective learning experiences. The level of productivity attained by a teacher can be measured through the quality of learning outcomes and learners produced through his inputs over a period of time. On the other hand, a teacher cannot acquire all the knowledge and skills required to function effectively in the profession through pre-service training. Hence, the need for quality in-service training programs that would enable the teacher to acquire new/existing knowledge that would keep them abreast with new information within their discipline. In-service training provides a platform for teachers to be trained and retrained on relevant issues that would help improve their teaching outcomes and productivity in the profession. Knowledge is evolving and research is continuous, teachers need to be abreast with a changing world in order to remain relevant and contribute meaningfully to the development of the nations' human resources. This emphasizes the

relevance of continuous in-service training for teachers as a means of enhancing their productivity on the job towards the attainment of set goals and objectives.

The challenges facing the effectiveness of teachers in the real classroom situation today are enormous. The teacher's productive capacity has been compounded by the problems of inadequate teaching skills/techniques, harsh environment for effective learning, poor socio-economic background statuses of students, particularly in public schools, and lack of motivation, among many other supposed factors. The prevalent conditions of most classrooms in Nigeria's public schools are highly offensive and therefore run counter-productive for a meaningful and effective teaching and learning to take place. The situation in the classrooms is so appalling that many of the school children and their teachers have to share their classrooms (often without doors and windows) with goats, reptiles and birds these aforementioned has posed a great challenged for teachers to be productive.

Conference Attendance and Teacher's Productivity

Generally speaking, staff development through in-service training in the nature of attending conferences offer one of the most promising ways of classroom instruction. It is an attempt to assist the classroom teachers to improve on their teaching strategies; techniques handle new instructional materials or possessed the necessary information and skills that are required for effective lesson delivery.

Obi (2019) conference also enhances teachers "growth and development. It is a formal meeting of people with shared interest, typically one that takes over several days mostly held at school level and at cluster level with purpose of reviewing and reflection on practice on a regular basis. Conference comprise different personalities in the field of education with bountiful of idea (Bright, 2016) discussing the form and use of conferences, which the researcher adopted as one of the elements under training recognized it strength for conveying message to a large a audience, while servicing opportunity to hear and comment on view of recognized authorities. Teachers have access to a broad range of ideas through conference which lead to the enhanced productivity.

The essence of conference is to keep the teacher up-to-date on the latest development in the field, or ensure the promotion of professional growth, help to improve pedagogical skills, keep teachers abreast with new knowledge, meet particular needs, such as curriculum development and orientation, help in leadership responsibility, help to improve mutual respect among teachers and recognized the need of modern teaching methods.

The important of teachers' professional development is very relevant to effective school administration (Agabi, 2019). According to Agba (2015), it is not just enough to recruit teachers for the programme, but to provide continuous in-service programme or development service programmes for the teachers to function effectively and efficiently. Thus, the teachers should be encouraged to attend training programmes for capacity building and development. This can be achieved by exposing them to in – service training, such as induction programmes, ICT training, workshops, conferences, seminars and refresher courses, particularly for non – professional teachers employed to teach in secondary schools in Rivers States (Agba 2015). To

ensure efficient and effective teaching in Cross Rivers State, there is need to train and retrain our teachers. In this era of knowledge explosion as a result of modern technologies particularly computer and ICT it becomes pertinent that teachers be provided with opportunities to update and improve their knowledge and skills through teacher development programmes. In this line of thought, Agba (2015) reported that teacher's retraining programmes apart from developing the teachers' self-confidence it also improves upon the teachers' teaching method, class control, supervision of students, and knowledge of subject matter as well as the use of instructional materials. These enhance teaching effectiveness and quality outcomes. In the same vein, Obi (2019) noted that teachers development programmes improve them both academically and professionally and apart from helping them to update their knowledge, it serves as a motivating factor for teacher efficiency. Arop (2018) showed that training of a teacher is positively associated with productivity in middle and high school mathematics. In the modern world, in-service training plays a crucial and pivotal role in improvement of education. Contextually, this work was delimited in to workshop and conference programmes as components of teacher professional development programme. Workshop is defined as assembled group of ten to twenty-five persons who share a common interest or problem. They meet together to improve their individual skill of a subject through intensive study, research, practice and discussion. A workshop is a type of interactive training section enriched with training packages and functions. Teachers also have the opportunity to participate in academic conferences. An academic conference is an event for researchers to present and discuss their works (Allen, 2015). Conferences usually encompass various presentations. They tend to be short and concise with a time span of about 10 to 30 minutes. Presentations are usually followed by a discussion. The work may be bundled in written form as academic papers and published as the conference proceedings. Usually, a conference will include keynote speakers (often scholars of some standing but sometimes individuals from outside academic). The key note lecture is often longer, lasting sometimes up to an hour and half, particularly if there are several keynote speakers on a panel. (Ogundane, 2019).

In addition to presentations, conferences also feature panel discussions round tables on various issues, poster session and workshops. Some conferences take more interactive formats. Conference ideally suggests discussion among persons of similar experiential exposure to the topic of discussion for the purpose of reaching agreements in controversial issues (Obi, 2019). In practice, however, lead papers are often presented by persons of knowledgeable profound exposure to a subject and discussions follow the presentation. Teachers tend to suffer from instructional planning and delivery as a result of poor attendance to conferences (Allen, 2015). It is found that proper conference organization can bring about high productivity in the education industry (Obi, 2019).

Information and Communication Technology and Teachers Productivity

Information and communication tools are very important for the development of education as well as its numerous stakeholders. Therefore, the field of education has been affected by the penetrating influence of Information and Communication Technology.

Undoubtedly, ICT has impacted on the quality and quantity of teaching, learning and research in traditional and distance educational institutions. In concrete terms, ICT can enhance teaching and learning through its dynamic, interactive and engaging content, and it can provide real opportunities for individualized instruction. ICT has the potential to accelerate, enrich and deepen skills, motivate and engage students in learning. Studies have also been carried out on this, for instance, Ngwu (2014) in his study on students and teachers perceptions of ICT use in classroom: Pakistani classrooms confirmed that the use of Information and Communication Technology (ICT) has become a major driving force in transforming education throughout the world. The usage of ICT in Pakistan has increased many folds in the last 10 years. The latest educational policy of the Government of Pakistan has stressed on using ICT in schools. The curriculum documents have also suggested teachers to integration ICT in their classrooms teaching and learning processes. Information and Communication Technology consists of various tools and systems that can be exploited by capable and creative teachers to improve teaching and learning situations. Ogundare (2019) identified five dimensions of ICT tools for teaching to include informative tools, resignation tools, constructive tools, communicative tools and collaborative tools. Expatriating on these tools, the informative tools include internet, network virtual drive, intranet systems, homepage; the 1) Informative tools - Internet, Network Virtual Drive, Intranet systems, Homepage, etc. (2) resignation devices - CD-ROM, etc. (3) Constructive tools - MS Word, PowerPoint, FrontPage, Adobe Photoshop, Lego Mindstorm, etc. 4) Communicative tools - e-mail, SMS, etc. (5) Collaborative tools - discussion boards, etc. forum These tools also help to relate school experiences to work practices, create economic viability for tomorrow's workers, strengthen teaching and provide opportunities for connection between school and the world (Techtems, 2017).

Information and Communication Technologies are essential tools in any educational setting. They have the potentials of being used to meet the learning needs of individual students, promote quality of educational opportunities, increase self-efficacy and independence of learning amongst students and improve teachers' professional development. ICT offers great opportunities for revolutionizing school administration (Ezaocha, 2015). It motivates and engages students in learning as they are encouraged to be more independent and responsible for their own learning. It helps to relate academics to the practice of today's work as the influence of ICT is pervasive in every field. Teaching with the aid of ICT tools have been proved to aid better understanding and performance by students, (UNESCO ICT CFT, 2018), but teachers cannot teach if they do not possess requisite ICT competencies for teaching. For students to learn how to search for knowledge using ICT tools, teachers must be able to guide them in this task. Therefore, the study seeks to determine the relationship between ICT tools and teachers productivity in Public secondary schools in Calabar Education of Cross Rivers State.

Information and communication technology training is another aspect of teacher development program. Teachers need ICT training to improve upon their job efficacy. In the period of knowledge driven Society, teachers need to acquire sound knowledge on how to use

ICT tools to enhance quality teaching and learning in the secondary schools. Conferences expose teachers to new teaching strategies and the use of modern instructional aids in teaching and learning.

Cross River state government must see it as a point of duty and retraining of teachers on regular basis especially with establishment of teacher's continuous training Institute in Biase Local Government Area to improve the quality of teaching and learning.

Purpose of the Study

The purpose of the study is to determine the relationship between in-service training, conference attendance ICT and teachers' productivity in public secondary schools in Calabar Education Zone of Cross River State, Nigeria.

Specifically, the study sought to

1. determine the influence of conference attendance on teacher's productivity in public secondary schools in Calabar Education Zone of Cross River State.
2. determine the influence of information and communication technology on teacher's productivity in public secondary schools in Calabar Education Zone of Cross River State

Null Hypotheses:

1. There is no significant influence of conference attendance on teachers' productivity in Calabar Education Zone of Cross River State.
2. There is no significant influence of information and communication technology on teachers' productivity in Calabar Education Zone of Cross River State.

Methodology

The study made used of survey research design. Survey is used by the researcher to gain a greater understanding about individuals or group perspectives to the concept. The population of this study comprised all principals and teachers in public secondary schools in Calabar Education Zone of Cross River State. The information from Cross River State Secondary Education Board revealed that there are 85 public secondary schools in Calabar Education Zone. The target population for the study is two thousand three hundred and seventeen (2,317) consisting of principals, vice principals and teachers for the 2021/2022 academic session (State Secondary Education Board, 2022). A multi-stage sampling procedure was adopted for the study

To select the local government areas used for the study, the researcher wrote the names of the seven local government areas that make up Calabar Education Zone on pieces of paper and folded them to conceal the information on each piece of paper. The researcher with eyes closed selected four pieces of paper with replacement, representing fifty percent (50%) of local government areas in the study area. In each of the four selected local government areas, fifty percent (50%) of public secondary schools (28) were selected for the study using the systematic

random sampling technique. In each of the four selected local government areas, the researcher wrote the names of all the schools in alphabetical order, every second school on the list was selected for the study.

To select respondents in each of the twenty-eight public secondary schools selected for the study, the researcher adopted the systematic sampling technique to select forty nine percent of respondents from 1030 in each of the schools. The names of the teachers were written in alphabetical order in each school. Every second name on the list was selected for the study while all the principals and vice principals were automatically selected for the study. The sample for this study consists of 510 respondents randomly selected from 27 public secondary schools in Calabar Education Zone of Cross River State. It comprised principals, vice principals and teachers that are still actively practicing in the teaching profession across schools in the study area.

A questionnaire titled “Conference Attendance and Teacher Productivity” was validated by three research experts in measurement and evaluation in the Department Educational Foundation, University of Calabar, Calabar. It was tested for reliability using Cronbach Alpha reliability method, the Cronbach Coefficient obtained were .71 and .73 which indicated high reliability of the research instrument.

Presentation of Results

This section presents the results of data analysis obtained in the study based on each hypothesis as well as their interpretation. The hypotheses are tested at .05 level of significance.

Null Hypothesis 1: There is no significant influence of conference attendance on teachers’ productivity in Calabar Education Zone of Cross River State.

The independent variable of this hypothesis was conference while the dependent variable was teachers’ productivity. Simple linear regression Predictors: (Constant statistics was used in testing the hypothesis and the results are presented in Table 1.

Table 1: Summary of data and simple regression analysis on the influence of conference attendance on teachers’ productivity in public secondary schools in Calabar Education Zone of Cross River State.

R	R Square	Adjusted R Square	Std. Error of the Estimate		
.132	.018	.006	7.76325		
Model	Sum of squares	DF	Mean Square	F	Sig
Regression	545.855	1	545.855	4.313	.038*
Residual	30616.138	508	60.268		
Total	31161.992	509			

conference attendance, Dependent variable: teachers’ productivity

The simple regression analysis in Table 1 on the influence of conference on predicting teacher's productivity in public secondary schools in Calabar Education Zone of Cross River State produced an adjusted R^2 of .006. This implies that 6.0 percent of the variance can be predicted from the independent variable (conference) on teacher's productivity. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was $F = 4.313$ having a p-value .038 with 1 and 508 degrees of freedom at .05 level of significance. The null hypothesis was rejected. This result therefore implies that organizing conference for teachers significantly influence productivity of secondary school teachers in the education zone by 6.0 percent. The result therefore implies that there was a significant influence of conference on teachers' productivity.

Null Hypothesis 2: There is no significant influence of information and communication technology on teachers' productivity in Calabar Education Zone of Cross River State.

The independent variable of this hypothesis was ICT while the dependent variable was teachers' productivity. Simple regression statistics was used in testing the hypothesis and the results are presented in Table 2.

Table 2: Summary of data and simple regression analysis on the influence of ICT on teachers' productivity in public secondary schools in Calabar Education Zone of Cross River State.

R	R Square	Adjusted R Square	Std. Error of the Estimate		
.108	.012	.010	7.68601		
Model	Sum of squares	DF	Mean Square	F	Sig
Regression	366.028	1	366.028	6.038	.014*
Residual	30795.965	508	60.622		
Total	31161.992	509			

Predictors: (Constant): ICT, Dependent Variable: teachers' productivity

The simple regression analysis in Table 2 on the influence ICT on predicting teachers' productivity in public secondary schools in Calabar Education Zone of Cross River State produced an adjusted R^2 of .010. This implies that 10.0 percent of the variance can be predicted from the independent variable (conference) in predicting teacher's productivity. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was $F = 6.038$ having a p-value .014 with 1 and 508 degrees of freedom at .05 level of significance. The null hypothesis was rejected. This result therefore implies that the used ICT significantly influence productivity of secondary school teachers in Calabar education zone by 10.0 percent. The result therefore implies that there was a significant influence of ICT on teachers' productivity.

Discussion of Findings

This section is devoted to the discussion of findings obtained in the study. The discussion was done according to each of the stated hypothesis.

Conference attendance and teachers' productivity

This research hypothesis which addresses the influence of conference on teachers' productivity in Calabar Education Zone revealed that there is a significant influence of conference on teachers' productivity in the study area. This finding could be based on the observation that teachers in secondary schools have been mandated to attend conferences to help improve the quality of teaching/learning in public secondary schools. The emphasis on attending conferences has encouraged teachers to embrace its utilization, which has helped to improve their productivity. The ability of government to organized conferences has yielded positive results in terms of teaching/learning outcomes in public schools in the study area.

This finding of this study is in tandem with that of Allen (2015) who reported that conference is concerned with the provision of professional assistance and guidance to teachers geared towards the achievement of effective teaching and learning in the school, stressing that the school administrator as a supervisor provides a professional attending guidance to teachers on the relevance of conference to teachers in order to improve their competencies for effective teaching process to enhance the learning, improved teachers productivity and growth of the students. conference leads to acquiring new knowledge that in-turn held their methods of teaching.

Information and Communication Technology and teachers' productivity

The finding obtained from analysis and testing of hypothesis two which addresses the influence of ICT on teachers' productivity in Calabar Education Zone revealed that the null hypothesis was rejected. This implied that there is a significant influence of ICT on teachers productivity in the study area. This finding could be traced to the fact that ICT facilities are very important in the learning outcome of students. Teachers' ability to acquire ICT skills effectively has been emphasized exhaustively to demonstrate its relevance to the job outcome of the teacher. Government has identified the importance of ICT and this has enabled teachers to develop competency in managing their classrooms effectively. This has improved teachers' productivity significantly in the study area.

This finding is in agreement with that of Ezaocha (2015) who revealed that over the years ICT has contributed immensely in teaching and learning process. It has been of great assistance in aiding the teacher to improve both his instructional techniques, classroom management and the learning process of the student, stressing that the major purpose of ICT is for the improvement of the teaching/ learning process.

Conclusion

Based on the results of the study, it was concluded that the re-training through conferences of teachers must be continuous process to abreast teachers with modern techniques of teaching.

Recommendations

Based on the findings of the study the following recommendations were made:

1. Officials of the Cross-River State Ministry of Education should from time to time organize conferences to teachers in the secondary school.
2. Professional bodies should extend invitation on conferences to teachers in the secondary school to aid as a window opportunity for them to improve on their teaching performance
3. ICT facilities should be provided by the state government for teachers to improve teaching and learning outcome.

References

- Agabi, J. A. (2019). *Issues in school management*. Lagos: Bolabay Publisher
- Agba, R. O. (2015). Problems of learning in public secondary schools: Implication for homes and schools in Nigeria. *Journal of Teacher Education, Kaduna NCCE*, 6(1) 222-226
- Allen, A. A. (2015). Effective school management and supervision: Imperative for Quality Education Service Delivery. *African education Review*, 9(3), 62-74. DOI: <http://dx.doi.org/10.4314/afrev.v9i3.6>.
- Ekundayo, M. A. (2019). Availability and utilization of instructional resources for teaching basic science and technology in secondary in Ilorin, Nigeria. 53rd Annual Conference Proceedings of Science Teachers Association of Nigeria
- Esu, I. O. (2017). Appraising the state of maintenance and management of available secondary school facilities on students' academic performance in Cross River State, Nigeria. *Journal of Education and Practice* www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.4, No.24.
- Ezaocha, T, (2015). Availability and use of ICT in south – western Nigeria colleges of education. *International Multidisciplinary Journal*,5(5), 315- 331.

Ngwu, D.O. (2014). School plant management practice in Nigeria: Trends issues and problems. In A. A. Olagboye, J. O. Fadipe (Eds). *Management of Nigerian Education: Project Monitoring and School Plant Maintenance*, Ondo: NEPA

Obi, R.A. (2019). Management of school physical facilities. Ibadan: *Foundation Publications*. 6 (2)25, April, 2021. 192-205

Ogundane, J. B. (2019). The Role of Head teacher in school plant management and Maintenance. In E.O. Fagbemiye, J.B. Babalola et al (eds) *Management of Primary and Secondary School Education in Nigeria*. NAEAP Publications.

Techtems, F. O. (2017). School quality indicators and secondary school teachers job performance in Cross River State, Nigeria. *Journal of Vocational Education*, 6 (2), 1-14